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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/500,823	02/10/2000	Oren Marmur	Marmur=2	3103

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EXAMINER	
PAYNE, DAVID C	

ART UNIT	PAPER NUMBER
2633	10

DATE MAILED: 05/22/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/500,823	MARMUR, OREN	
	Examiner	Art Unit	
	David C. Payne	2633	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03 March 2003* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-4,6,8 and 10* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4,6,8 and 10* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *20 September 2002* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *5,7* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to Double Patenting:

   Based on the amendments to both the 09/500,823 application and the 09/500,824 application, the Double Patenting rejection is hereby withdrawn.

2. Applicant's arguments with respect to the prior art of Denkin:

   The rejections based on the Denkin patent are hereby withdrawn.

3. Applicant's arguments with respect to Takeshita have been fully considered but are not persuasive.

   Applicant's assertion,

   > Furthermore, it is no less important that the method disclosed in this reference requires a longer period of time from detection through transfer of a trouble alarm via the optical switch network elements until operation is actually resumed along the protective link.

   argues a limitation of time "longer period" which is not part of the claim language. Furthermore, Takeshita disclosed that an optical cross connect is able to detect the occurrence of wavelength path trouble or the deterioration of wavelength path quality **or** ... detect the AIS issued by the network elements of other optical layers."(see col./lines: 12/40-45). In this case the optical cross connect is appropriately considered a "first location" or "second location" that is capable of itself detecting a fault without the need of an alarm or another unit.

   Applicant's assertion:

> According to the present invention, the determination as to whether to switch to the protection link is taken at each end of the link independently of the determination made at the other end of the link and is made based on the total energy detected at that specific end of the link, independently of any detection at the other end.

does not overcome the Takeshita reference as shown above, since Takeshita has disclosed that a single location "cross connect" for example is able to independently detect errors. Furthermore, the newly added limitation of "**independent**" determination to switch does not appear to have support in the specification since the following excerpt appears to contradict applicant's claim, see p. 10 lines 10-15, repeated here:

> Once the shutdown procedure is initiated, OPM **400** switches to protection mode as illustrated in Fig. 3C. Such a switch triggers a LOS in LOS Detection unit **430**, and once this LOS is detected, OPM **410** will switch to a protection mode (Fig. 3D), completing the system's required switch to the protection mode.

Thus the applicant's claim to independence between locations appears somewhat in conflict with the description in the specification as noted above.

Specification

1. The abstract of the disclosure is objected to because the abstract must be no longer than 150 words. Correction is required. See MPEP § 608.01(b).
   Although the latest effective date of 37 CFR 1.72(b) is 11/7/200, such a requirement is unrelated to the filing date of the application as long as the case is pending and is therefore remains subject prior to allowance or publication. This notice is supplied as a courtesy to the applicant. If the applicant fails to supply a revised abstract, the examiner will prepare one for the application.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-4, 6, 8 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takeshita et al. US 6,407,834 B1 (Takeshita).

Re claims 1 and 2, Takeshita disclose an optical communication network (figure 1) comprising an optical transmission and reception links extending between first and second locations and carrying traffic in normal operation from the first location to the second location and protections transmission and reception links for carrying the traffic in the event of a fault, a method for managing routing of traffic to the protection links, which method comprises the steps of:

detecting a fault on the optical link; (e.g., c/l: 10: 15 – 40)

checking the energy on the link with respect to a pre-defined threshold; (e.g., c/l: 10: 45 – 50)

switching traffic transmission and reception if energy falls below the pre-defined threshold. (e.g., c/l: 10: 50 – 60)

Takeshita does not disclose that the fault is detected at either the first or second location. However, it would have been obvious to one of ordinary skill in the art at the time of invention that since the Takeshita invention measures trouble or quality deterioration of optical signals anywhere in the wavelength path that this is equivalent to the claimed invention. The Takeshita invention is not restricted to measuring a drop in signal quality at any one location but rather is capable of measure fault anywhere along the wavelength path.

Re claims 3 and 4, Takeshita disclosed the ability to protect any wavelength or a bundle of

wavelengths (e.g., c/l: 5: 15 – 45).

Re claim 6, Takeshita furthermore disclosed on switching channels along a wavelength path failures (e.g., c/l: 10: 40 – 50). While Takeshita does not disclose that non-failing channels undergo continuous operation it would have been obvious to one of ordinary skill in the art at the time of invention to claim as such. It is well known to switch signals along a path failure and it widely recognized by those of ordinary skill in the art of the lack of need and inefficiency of rerouting all signals in a network due to failure along a particular path unless necessary to do so. Furthermore, continuous operation attends to the same objective of non-switching of paths for non-failing channels.

Re claims 8 and 10, Takeshita disclosed monitoring of all wavelength paths (e.g., 5/40 – 45, 6/35 – 55). This is understood to include spare (protection) links and any wavelength links with or without signals.

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David C. Payne whose telephone number is (703) 306-0004. The examiner can normally be reached on M-F, 7a-4p.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on (703) 305-4729. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

dcp
April 21, 2003

Leslie Pascal
LESLIE PASCAL
PRIMARY EXAMINER